## **Eriogonum robustum** (E. Greene)

## ALTERED ANDESITE BUCKWHEAT

**FAMILY:** *Polygonaceae*, the buckwheat family.

SYNONYMS: Eriogonum lobbii var. robustum

**STATUS:** 

Heritage Program SENSITIVE LIST, ranks: G2G3Q S2S3

USFWS/ESA: species of concern. STATE OF NEVADA: none. BLM: Special Status Species. USFS: none.

**NNNPS:** watch list.

**POPULATION CENSUS: 25 extant occurrences mapped** at 1.0 km (0.6 mi) separation, OR **130 extant and 2 extirpated occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 1,600,000**+, total estimated **area 329 ha (813 ac). TREND:** DECLINING RAPIDLY.

**IMPACTS AND MAJOR THREATS:** No summary available (see references).

**INVENTORY EFFORT:** Surveys are substantially complete, with only a minor amount of potential habitat remaining unexamined. Most recent entered survey 1998, average year of last survey 1995.

Years since last entered survey (percent of mapped records at various survey ages): 0-5 yrs: 11.3%; 6-10 yrs: 87.2%; 21-30 yrs: .8%; 31-50 yrs: .8%.

**LAND MANAGEMENT** in decreasing predominance: private lands, U. S. Bureau of Land Management, Humboldt-Toiyabe National Forest, Nevada state lands, county lands, designated wilderness.

**RANGE:** Storey and Washoe counties, Nevada. **Nevada endemic.** Maximum **range dimension 40.5 km (25.2 mi)** excluding most disjunct record. **Type specimen** collected in Washoe County.

**ELEVATIONS RECORDED:** 4410-7325 feet (1344-2233 meters).

**HABITAT:** Dry, shallow, highly acidic (pH 3.3-5.5) gravelly clay soils mainly of the Smallcone Series, derived from weathering of hydrothermal sulfide deposits formed in andesite, or sometimes in rhyolitic or granitoid rocks, forming mostly barren yellowish to orange brown patches on ridges, knolls, and steep slopes on all aspects, on all but the most xeric sites supporting a sparse, stunted relict woodland of yellow pines (Pinus ponderosa and/or P. jeffreyi) and pinyon pine (P. monophylla), with an equally sparse understory codominated with Arenaria nuttallii fragilis, Ericameria parryi or E. nauseosa, Elymus elymoides, and/or Poa secunda. Other normally mesic-montane conifer taxa, such as white fir, western white pine, and lodgepole pine, are occasionally present.

PHENOLOGY: flowering late-spring to summer. Range of most frequent survey months: May-September.

**LIFE-FORM AND HABIT:** semi-woody long-lived perennial cushion.

**DESCRIPTION:** Large perennial mound with rounded grayish leaves and large pale-yellow inflorescences. **Distinguishing features:** A distinctive and unmistakable species.

**PHOTOGRAPHS:** Morefield (2000); Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Mozingo and Williams (1980).

OTHER GENERAL REFERENCES (listed separately): Reveal (1985).

**SPECIFIC REFERENCES:** 

Greene, E. L. 1885. Studies in the botany of California and parts adjacent. Bulletin of the California Academy of Sciences 1: 66-127.

Kuyper, K. F., U. Yandell, and R. S. Nowak. 1997. On the taxonomic status of Eriogonum robustum (Polygonaceae), a rare endemic in western Nevada. Great Basin Naturalist 57: 1-10.

Morefield, J. D. 2000. Current knowledge and conservation status of Eriogonum robustum E. Greene (Polygonaceae), the altered andesite buckwheat. Carson City: Nevada Natural Heritage Program, status report prepared for the U. S. Fish and Wildlife Service, Reno, Nevada.

Reveal, J. L. 1985. New Nevada entities and combinations in Eriogonum (Polygonaceae). Great Basin Naturalist 45: 276-280.

**OF FURTHER INTEREST:** The Nevada Natural Heritage Program and Kuyper et al. (1997) consider this taxon a good, distinct species, and all ranks are for that taxonomic level.